

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) An apparatus for connecting a TV (Television Set) and a computer, comprising:

a TV coding unit for encoding control signals including at least one of a mouse signal, a keyboard signal, a microphone signal and control signals for controlling a computer, which are generated in a TV and generating a first packet signal by using the encoded control signals;

a computer coding unit for encoding computer signals including at least one of a video signal, an audio signal and a control signal generated in the computer and generating a second packet signal by using the encoded computer signals;

a TV transmission and receiving unit, provided in the TV, for receiving the first packet signal from the TV coding unit, transmitting the received first packet signal to the computer and receiving the second packet signal from the computer;

a computer transmission and receiving unit, provided in the computer, for receiving the second packet signal from the computer coding unit, transmitting the received second packet signal to the TV and receiving the first packet signal from the TV;

a TV decoding unit, provided in the TV, for receiving the second packet signal from the TV transmission and receiving unit, decoding the received second packet signal and

recovering the decoded second packet signal into the video signal, the audio signal and the control signal of the computer;

a computer decoding unit for receiving the first packet signal from the computer transmission and receiving unit, decoding the received first packet signal and recovering the decoded first packet signal into the mouse signal, the keyboard signal, the microphone signal and the control signals for controlling the computer; and

a transmission line connected between the TV transmission and receiving unit of the TV and the computer transmission and receiving unit of the computer for transmitting the first packet signal and the second packet signal.

2. (Original) The apparatus of claim 1, wherein said transmission line includes:

a first transmission line for transmitting the first packet signal from the TV transmission and receiving unit to the computer transmission and receiving unit; and

a second transmission line for transmitting the second packet signal from the computer transmission and receiving unit to the TV transmission and receiving unit.

3-20. (Canceled)

21. (Currently Amended) A method, comprising:

generating, ~~at~~ in a television, control signals including at least one of a mouse signal, a keyboard signal, a microphone signal and control signals for controlling a personal computer;

encoding, ~~a packet signal output from a television circuit of the television based on~~ in the television, the generated control signals;

generating, in the television, a packet signal by using the encoded control signals;

sending the ~~encoded-generated~~ packet signal to a personal computer,

receiving the ~~encoded-generated~~ packet signal sent from the television;

decoding the received signal for input into a circuit of the personal computer; and

performing the function of the personal computer according to the decoded signal.

22-23. (Canceled)

24. (Currently Amended) The method of claim 21, wherein the ~~encoded-generated~~ packet signal output from the television is received along a wireless link.

25. (Currently Amended) The method of claim 21, wherein the ~~encoded-generated~~ packet signal output from ~~the~~ a television circuit of the television is wirelessly transmitted to the personal computer.

26-30. (Canceled)

31. (Currently Amended) A system, comprising:

- a first interface unit in a television; and
- a second interface unit coupled to a personal computer,

wherein the first interface unit, in the television, generates control signals including at least one of a mouse signal, a keyboard signal, a microphone signal and control signals for controlling the personal computer, the first interface unit further encoding ~~a first packet signal in the television based on the~~ generated control signals in the television and generating a first packet signal in the television by using the encoded control signals, and the first interface unit sending the ~~encoded~~ first packet signal from the television to the personal computer over a communications link, the first packet signal controlling a function performed by the personal computer, and the second interface unit sends a second packet signal generated in the personal computer to the television over the communications link and the second packet signal includes at least one of a monitor display signal and a sound signal to be projected and to be played through the television.

32-33. (Canceled)

34. (Previously Presented) The system of claim 31, wherein the control signals include microphone data.

35. (Previously Presented) The system of claim 31, wherein the communications link is a wireless link.

36. (Previously Presented) A method for controlling a computer at the side of a TV (Television set), comprising:

encoding control signals including at least one of a mouse signal, a keyboard signal, a microphone signal and control signals for controlling a computer, which are generated in a TV and generating a first packet signal by using the encoded control signals;

encoding computer signals including at least one of a PC monitor display signal, sound signals and control signals generated in the computer and generating a second packet signal by using the encoded computer signals;

receiving the first packet signal from the TV, transmitting the received first packet signal to the computer and receiving the second packet signal from the computer;

receiving the second packet signal from the computer, transmitting the received second packet signal to the TV and receiving the first packet signal from the TV;

decoding the received second packet signal and recovering the decoded second packet signal into the PC monitor display signal, the sound signals and the control signals of the computer; and

decoding the received first packet signal and recovering the decoded first packet signal into the control signal including the mouse signal, the keyboard signal, the microphone signal and the control signals for controlling the computer.